1.1 **DIFFERENTIATED TISSUE OR ORGAN OTHER THAN BLOOD, PER SE, OR DIFFERENTIATED TISSUE OR ORGAN MAINTAINING; COMPOSITION THEREFOR**
1.2 .Including perfusion; composition therefor
1.3 .Including freezing; composition therefor
2 **MAINTAINING BLOOD OR SPERM IN A PHYSIOLOGICALLY ACTIVE STATE OR COMPOSITIONS THEREOF OR THEREFOR OR METHODS OF IN VITRO BLOOD CELL SEPARATION OR TREATMENT**
3 **CONDITION RESPONSIVE CONTROL PROCESS**
4 **MEASURING OR TESTING PROCESS INVOLVING ENZYMES OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP THEREFORE; PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP**
5 .Involving virus or bacteriophage
6 .Involving nucleic acid
7.1 .Involving antigen-antibody binding, specific binding protein assay or specific ligand-receptor binding assay
7.2 ..Involving a micro-organism or cell membrane bound antigen or cell membrane bound receptor or cell membrane bound antibody or microbial lysate
7.21 ...Animal cell
7.22 ....Parasite or protozoa
7.23 ....Tumor cell or cancer cell
7.24 ....Leukocyte (e.g., lymphocyte, granulocyte, monocyte, etc.)
7.25 ....Erythrocyte
7.3 ...Flagellar-antigen or pili-antigen
7.31 ...Fungi (e.g., yeast, mold, etc.)
7.32 ...Bacteria or actinomycetales
7.33 ....Staphylococcus
7.34 ....Streptococcus
7.35 ....Salmonella
7.36 ....Sexually transmitted disease (e.g., chlamydia, syphilis, gonorrhea, etc.)
7.37 ....Escherichia coli
7.4 ..To identify an enzyme or isoenzyme
7.5 ..Involving avidin-biotin binding
7.6 ..Involving a modified enzyme (e.g., abzyme, recombinant, chemically altered, etc.)
7.7 ..Assay in which a label present is an apoenzyme, prosthetic group, or enzyme cofactor
7.71 ..Assay in which a label present is an enzyme inhibitor or functions to alter enzyme activity
7.72 ..Assay in which a label present is an enzyme substrate or substrate analogue
7.8 ..Involving nonmembrane bound receptor binding or protein binding other than antigen-antibody binding
7.9 ..Assay in which an enzyme present is a label
7.91 ...Enzyme produces product which is part of another reaction system (e.g., cyclic reaction, cascade reaction, etc.)
7.92 ...Heterogeneous or solid phase assay system (e.g., ELISA, etc.)
7.93 ....Competitive assay
7.94 ....Sandwich assay
7.95 ....Indirect assay
8 .Involving luciferase
9 .Geomicrobiological testing (e.g., for petroleum, etc.)
10 .Involving uric acid
11 .Involving cholesterol
12 .Involving urea or urease
13 .Involving blood clotting factor (e.g., involving thrombin, thromboplastin, fibrinogen, etc.)
14 .Involving glucose or galactose
15 .Involving transferase
16 ..Involving transaminase
17 ..Involving creatine phosphokinase
18 .Involving hydrolase
19 ..Involving esterase
20 ...Involving cholinesterase
21 ...Involving phosphatase
22 ..Involving amylase
23 ..Involving proteinase
24 ..Involving peptidase
25 .Involving oxidoreductase
26 ..Involving dehydrogenase

27 ..Involving catalase
28 ..Involving peroxidase
29 .Involving viable micro-organism
30 ..Methods of sampling or inoculating or spreading a sample; methods of physically isolating an intact micro-organism
31 ..Testing for sterility condition
32 ..Testing for antimicrobial activity of a material
33 ...Using multifield media
34 ..Determining presence or kind of micro-organism; use of selective media
35 ...Using radioactive material
36 ...Streptococcus; staphylococcus
37 ...Nitrate to nitrite reducing bacteria
38 ...Enterobacteria
39 ...Quantitative determination
40 ....Using multifield media
40.5 .Involving fixed or stabilized, nonliving microorganism, cell, or tissue (e.g., processes of staining, stabilizing, dehydrating, etc.; compositions used therefore, etc.)
40.51 ..Involving a monolayer, smear or suspension of microorganisms or cells
40.52 ..Involving tissue sections
41 **MICRO-ORGANISM, TISSUE CELL CULTURE OR ENZYME USING PROCESS TO SYNTHESIZE A DESIRED CHEMICAL COMPOUND OR COMPOSITION**
42 .Process involving micro-organisms of different genera in the same process, simultaneously
43 .Preparing compound having a 1-thia-4-aza-bicyclo (3.2.0) heptane ring system (e.g., penicillin, etc.)
44 ..By desacylation of the substituent in 6-position
45 ..By acylation of the substituent in 6-position
46 ..In presence of phenyl acetic acid or phenyl acetamide or their derivatives
47 .Preparing compound having a 1-thia-5-aza-bicyclo (4.2.0) octane ring system (e.g., cephalosporin, etc.)
48 ..Di-substituted in 7-position
49 ..Cephalosporin C
50 ..By acylation of the substituent in the 7-position
51 ..By desacylation of the substituent in the 7-position
52 .Preparing compound containing a cyclopentanohydrophenanthrene nucleus; nor-, homo-, or D-ring lactone derivatives thereof
53 ..Containing heterocyclic ring
54 ..Acting on D-ring
55 ...Acting at 17-position
56 ....Hydroxylating at 17-position
57 ...Hydroxylating at 16-position
58 ..Hydroxylating
59 ...At 11-position
60 ....At 11 alpha position
61 ..Dehydrogenating; dehydroxylating
62 ...Forming an aryl ring from "A" ring
63 .Preparing compound containing a prostaglandin nucleus
64 .Preparing compound other than saccharide containing a tetracycline nucleus (e.g., naphacene, etc.)
65 .Preparing compound other than saccharide containing a gibberellin nucleus (i.e., gibbane)
66 .Preparing compound other than saccharide containing alloxazine or isoalloxazine nucleus
67 .Preparing compound containing a carotene nucleus (i.e., carotene)
68.1 .Enzymatic production of a protein or polypeptide (e.g., enzymatic hydrolysis, etc.)
69.1 .Recombinant DNA technique included in method of making a protein or polypeptide
69.2 ..Enzyme inhibitors or activators
69.3 ..Antigens
69.4 ..Hormones and fragments thereof
69.5 ..Lymphokines or monokines

69.51 ...Interferons
69.52 ...Interleukins
69.6 ..Blood proteins
69.7 ..Fusion proteins or polypeptides
69.8 ..Signal sequence (e.g., beta-galactosidase, etc.)
69.9 ...Yeast derived
70.1 .Using tissue cell culture to make a protein or polypeptide
70.2 ..Fused or hybrid cells
70.21 ...Producing monoclonal antibody
70.3 ..Animal tissue cell culture
70.4 ...Blood (lymphoid) cell culture
70.5 ....Producing interferons
71.1 .Using a micro-organism to make a protein or polypeptide
71.2 ..Procaryotic micro-organism
71.3 ...Antibiotic or toxin
72 .Preparing compound containing saccharide radical
73 ..Preparing S-glycoside (e.g., lincomycin, etc.)
74 ..Preparing O-glycoside (e.g., glucosides, etc.)
75 ...Oxygen of the saccharide radical is directly bonded to a nonsaccharide heterocyclic ring or a fused- or bridged-ring system which contains a nonsaccharide heterocyclic ring (e.g., coumermycin, novobiocin, etc.)
76 ....The hetero ring has eight or more ring members and only oxygen as ring hetero atoms (e.g., erythromycin, spiramycin, nystatin, etc.)
77 ...Oxygen atom of the saccharide radical is directly linked through only acyclic carbon atoms to a nonsaccharide heterocyclic ring (e.g., bleomycin, phleomycin, etc.)
78 ...Oxygen atom of the saccharide radical is directly bonded to a condensed ring system having three or more carboxyclic rings (e.g., dauomycin, adriamycin, etc.)
79 ...Oxygen atom of the saccharide radical is bonded to a cyclohexyl radical (e.g., kasugamycin, etc.)
80 ....Cyclohexyl radical is substituted by two or more nitrogen atoms (e.g., destomycin, neamin, etc.)
81 .....Cyclohexyl radical is attached directly to a nitrogen atom of two or more N-C(=N)-N radicals (e.g., streptomycin, etc.)
82 .....Having two saccharide radicals bonded through only oxygen to adjacent ring carbons of the cyclohexyl radical (e.g., ambutyrosin, ribostamycin, etc.)
83 ......Containing three or more saccharide radicals (e.g., liquidomycin, neomycin, lividomycin, etc.)
84 ..Preparing nitrogen-containing saccharide
85 ...N-glycoside
86 ....Cobalamin (i.e., vitamin B12, LLD factor)
87 ....Nucleoside
88 .....Having a fused ring containing a six-membered ring having two N-atoms in the same ring (e.g., purine nucleosides, etc.)
89 ....Nucleotide
90 .....Dinucleotide (e.g., NAD, etc.)
91.1 .....Polynucleotide (e.g., nucleic acid, oligonucleotide, etc.)
91.2 ......Acellular exponential or geometric amplification (e.g., PCR, etc.)
91.21 ....Involving the making of multiple RNA copies
91.3 ......Polynucleotide contains only ribonucleotide monomers
91.31 ....Involving catalytic ribonucleic acid
91.32 ....Prepared from virus, prokaryotic acid
91.33 ....Involving virus
91.4 ......Modification or preparation of a recombinant DNA vector
91.41 ....By insertion or addition of one or more nucleotides
91.42 ....Involving deletion of a nucleotide or nucleotides from a vector

91.5 ......Acellular preparation of polynucleotide
91.51 ....Involving RNA as a starting material or intermediate
91.52 ....Involving a ligase (6.)
91.53 ....Involving a hydrolase (3.)
92 .....Having a fused ring containing a six-membered ring having two N-atoms in the same ring (e.g., purine based mononucleotides, etc.)
93 ..Mashing or wort making
94 ..Produced by the action of an isomerase (e.g., fructose by the action of xylose isomerase on glucose, etc.)
95 ..Produced by the action of a beta-amylase (e.g., maltose by the action of beta-amylase on amylose, etc.)
96 ..Produced by the action of an exo-1.4 alpha glucosidase (e.g., dextrose by the action of glucoamylase on starch, etc.)
97 ..Produced by the action of a glycosyl transferase (e.g., alpha, beta, gamma-cyclodextrins by the action of glycosyl transferase on starch, etc.)
98 ..Produced by the action of an alpha-1, 6-glucosidase (e.g., amylose debranched amylopectin by the action of pullulanase, etc.)
99 ..Produced by the action of a carbohydrase (e.g., maltose by the action of alpha amylase on starch, etc.)
100 ..Disaccharide
101 ..Polysaccharide of more than five saccharide radicals attached to each other by glycosidic bonds
102 ...Pullulan
103 ...Dextran
104 ...Xanthan; i.e., xanthomonas-type heteropolysaccharides
105 ..Monosaccharide
106 .Preparing alpha or beta amino acid or substituted amino acid or salts thereof
107 ..Proline; hydroxyproline; histidine
108 ..Tryptophan; tyrosine; phenylalanine; 3,4 dihydroxyphenylalanine
109 ..Aspartic acid (asparaginic acid); asparagine
110 ..Glutamic acid; glutamine
111 ...Utilizing biotin or its derivatives
112 ...Utilizing surfactant fatty acids or fatty acid esters (i.e., having seven or more atoms)
113 ..Methionine; cysteine; cystine
114 ..Citrulline; arginine; ornithine
115 ..Lysine; diaminopimelic acid; threonine; valine
116 ..Alanine; leucine; isoleucine; serine; homoserine
117 .Preparing heterocyclic carbon compound having only O, N, S, Se, or Te as ring hetero atoms
118 ..Containing two or more hetero rings
119 ...Containing at least two hetero rings bridged or fused among themselves or bridged or fused with a common carbocyclic ring system, (e.g., rifamycin, etc.)
120 ..Nitrogen or oxygen hetero atom and at least one other diverse hetero ring atom in the same ring
121 ..Nitrogen as only ring hetero atom
122 ...Containing six-membered hetero ring
123 ..Oxygen as only ring hetero atom
124 ...Containing a hetero ring of at least seven ring members (e.g., zearalenone, macrocyclic lactones, etc.)
125 ...Containing six-membered hetero ring (e.g., fluorescein, etc.)
126 ...Containing five-membered hetero ring (e.g., griseofulvin, etc.)
127 .Preparing compound containing at least three carbocyclic rings
128 .Preparing nitrogen-containing organic compound
129 ..Amide (e.g., chloramphenicol, etc.)
130 .Preparing sulfur-containing organic compound

131 .Preparing organic compound containing a metal or atom other than H, N, C, O, or halogen
132 .Preparing oxygen-containing organic compound
133 ..Containing quinone nucleus (i.e., quinoid structure)
134 ..Fat; fatty oil; ester-type wax; higher fatty acid (i.e., having at least seven carbon atoms in an unbroken chain bound to a carboxyl group); oxidized oil or fat
135 ..Carboxylic acid ester
136 ..Containing a carboxyl group
137 ...Sugar acid having five or more carbon atoms (i.e., aldonic, keto-aldonic, or saccharic acid)
138 ....Alpha-ketogulonic acid (i.e., 2-ketogulonic acid)
139 ...Lactic acid
140 ...Acetic acid
141 ...Propionic or butyric acid
142 ...Polycarboxylic acid
143 ....Having keto group (e.g., alpha-ketoglutaric acid, etc.)
144 ....Tricarboxylic acid (e.g., citric acid, etc.)
145 ....Dicarboxylic acid having four or less carbon atoms (e.g., fumaric, maleic, etc.)
146 ...Hydroxy carboxylic acid
147 ..Containing carbonyl group
148 ...Ketone
149 ....Cyclopentanone or cyclopentadione containing compound
150 ....Acetone containing product
151 .....Substrate contains grain or cereal material
152 .....Substrate contains protein as nitrogen source
153 .....Substrate contains inorganic nitrogen source
154 .....Substrate contains inorganic compound, other than water
155 ..Containing hydroxy group
156 ...Aromatic
157 ...Acyclic
158 ....Polyhydric
159 .....Glycerol
160 ....Butanol
161 ....Ethanol
162 .....Multiple stages of fermentation; multiple types of micro-organisms or reuse of micro-organisms
163 .....Produced as by-product, or from waste, or from cellulosic material substrate
164 ......Substrate contains sulphite waste liquor or citrus waste
165 ......Substrate contains cellulosic material
166 .Preparing hydrocarbon
167 ..Only acyclic
168 .Preparing element or inorganic compound except carbon dioxide
169 .Using actinomycetales
170 .Using bacteria
171 .Using fungi
440 **PROCESS OF MUTATION, CELL FUSION, OR GENETIC MODIFICATION**
441 .Mutation employing a chemical mutagenic agent
442 ..By replacement of standard nucleic acid base with base analog (e.g., 5-bromouracil, etc.)
443 ..By use of intercalating agent (e.g., acridine orange, etc.)
444 ..By use of alkylating agent (e.g., nitrosoguanidine, etc.)
445 ..By use of oxidative deamination agent (e.g., nitrous acid, etc.)
446 .Mutation employing radiation or electricity
447 ..X-ray irradiation
448 ..Ultraviolet irradiation
449 .Fusion of cells
450 ..Employing electric current
451 ..One of the fusing cells is a human antibody-producing cell
452 ..One of the fusing cells is a mouse antibody-producing cell
453 ..One of the fusing cells is a plant cell
454 ..One of the fusing cells is a microorganism (e.g., prokaryote, fungus, etc.)
455 .Introduction of a polynucleotide molecule into or rearrangement of nucleic acid within an animal cell
456 ..The polynucleotide is encapsidated within a virus or viral coat

457 ...Helper virus is present
458 ..The polynucleotide is coated with or encapsulated within a lipid containing material (e.g., liposome, etc.)
459 ..Involving particle-mediated transfection (i.e., biolistic transfection)
460 ..Involving laser treatment of the cell before or during transfection
461 ..Involving electroporation
462 ..Involving site-specific recombination (e.g., Cre-lox, etc.)
463 ..Involving general or homologous recombination (e.g., gene targeting, etc.)
464 ..Involving gene duplication within the cell (e.g., amplification, co-amplification, etc.)
465 ..Involving co-transfection
466 ..The polynucleotide is a shuttle vector or a transiently replicating hybrid vector
467 ..Introducing an oncogene to establish a cell line
468 .Introduction of a polynucleotide molecule into or rearrangement of a nucleic acid within a plant cell
469 ..Introduction via Agrobacterium
470 ..Introduction via electroporation, particle, fiber or microprojectile mediated insertion, or injection
471 .Introduction of a polynucleotide molecule into or rearrangement of nucleic acid within a microorganism (e.g., bacteria, protozoa, bacteriophage, etc.)
472 ..The polynucleotide is encapsidated within a bacteriophage, bacteriophage coat, or transducing particle
473 ..The polynucleotide contains a transposon
474 ..The polynucleotide is a cosmid
475 ..The polynucleotide is unencapsidated bacteriophage or viral nucleic acid
476 ..The polynucleotide is a plasmid or episome
477 ...Plasmid or episome contains DNA targeting homologous recombination to bacteriophage, viral, or chromosomal DNA within a microorganism
478 ...Plasmid or episome contains at least part of a gene encoding a restriction endonuclease or modification enzyme
479 ...Plasmid or episome confers the ability to utilize directly a compound which a wild type microorganism is unable to utilize
480 ...Plasmid or episome contains at least part of a gene encoding a toxin or encoding for virulence or pathogenicity
481 ...Plasmid or episome contains a gene which complements a nutritional deficiency mutation
482 ...Plasmid or episome contains a gene which confers resistance to metal, silicon, selenium, or tellurium toxicity
483 ...Yeast is a host for the plasmid or episome
484 ...Mycelial fungus is a host for the plasmid or episome
485 ...Microorganism of the genus Bacillus is a host for the plasmid or episome
486 ...Microorganism of the genus Streptomyces is a host for the plasmid or episome
487 ...Microorganism of the genus Brevibacterium or the genus Corynebacterium is a host for the plasmid or episome
488 ...Microorganism of the genus Escherichia is a host for the plasmid or episome
489 ...Plural nonidentical plasmids are introduced into a host microorganism or culture thereof (e.g., plasmid is part of a library, etc.)
490 ..The polynucleotide is an unbranched linear fragment
173.1 **TREATMENT OF MICRO-ORGANISMS OR ENZYMES WITH ELECTRICAL OR WAVE ENERGY (E.G., MAGNETISM, SONIC WAVES, ETC.)**
173.2 .Enzyme treated

173.3 .Modification of viruses (e.g., attenuation, etc.)
173.4 .Cell membrane or cell surface is target
173.5 ..Membrane permeability increased
173.6 ...Electroporation
173.7 ..Lytic effect produced (e.g., disruption of cell membrane for release of subcellular parts; e.g., nucleic acids, etc.)
173.8 .Metabolism of micro-organism enhanced (e.g., growth enhancement or increased production of microbial product)
173.9 .Concentration, separation, or purification of micro-organisms
174 **CARRIER-BOUND OR IMMOBILIZED ENZYME OR MICROBIAL CELL; CARRIER-BOUND OR IMMOBILIZED CELL; PREPARATION THEREOF**
175 .Multi-enzyme system
176 .Enzyme or microbial cell is immobilized on or in an inorganic carrier
177 .Enzyme or microbial cell is immobilized on or in an organic carrier
178 ..Carrier is carbohydrate
179 ...Carbohydrate is cellulose or derivative thereof
180 ..Carrier is synthetic polymer
181 ...Attached to the carrier via a bridging agent
182 ...Enzyme or microbial cell is entrapped within the carrier (e.g., gel, hollow fibre)
183 **ENZYME (E.G., LIGASES (6.), ETC.), PROENZYME; COMPOSITIONS THEREOF; PROCESS FOR PREPARING, ACTIVATING, INHIBITING, SEPARATING, OR PURIFYING ENZYMES**
184 .Enzyme inactivation by chemical treatment
185 .Malt
186 .Pancreatin
187 .Preparing granular- or free-flowing enzyme composition
188 .Stablizing an enzyme by forming a mixture, an adduct or a composition, or formation of an adduct or enzyme conjugate
188.5 .Catalytic antibody
189 .Oxidoreductase (1.) (e.g., luciferase)
190 ..Acting on CHOH group as donor (e.g., glucose oxidase, lactate dehydrogenase (1.1))
191 ..Acting on nitrogen-containing compound as donor (1.2, 1.5, 1.7)
192 ..Acting on hydrogen peroxide as acceptor (1.11)
193 .Transferase other than ribonuclease (2.)
194 ..Transferring phosphorus containing group (e.g., kineases, etc.(2.7))
195 .Hydrolase (3.)
196 ..Acting on ester bond (3.1)
197 ...Carboxylic ester hydrolase (3.1.1)
198 ....Triglyceride splitting (e.g., lipase, etc. (3.1.1.3))
199 ...Ribonuclease (3.1.4)
200 ..Acting on glycosyl compound (3.2)
201 ...Acting on alpha-1, 4-glucosidic bond, (e.g., hyaluronidase, invertase, amylase, etc. (some 3.2.1))
202 ....Alpha-amylase, microbial source
203 .....Fungal source
204 ....Alpha-amylase, plant source (3.2.1.1)
205 ....Glucoamylase (3.2.1.3)
206 ...Acting on beta-1, 4 link between N-acetylmuramic acid and 2-acetylamino 2 deoxy-D-glucose (e.g., lysozyme, etc.)
207 ...Acting on beta-galatose-glycoside bond (e.g., beta-galactosidase, etc.)
208 ...Acting on alpha-galatose-glycoside bond (e.g., alpha-galactosidase, etc.)
209 ...Acting on beta-1, 4-glucosidic bond (e.g., cellulase, etc. (3.2.1.4))
210 ...Acting on alpha-1, 6-glucosidic bond (e.g., isoamylase, pullulanase, etc.)
211 ....Dextranase (3.2.1.11)
212 ..Acting on peptide bond (e.g., thromboplastin, leucine amino-peptidase, etc., (3.4))

213 ...Trypsin; chymotrypsin
214 ...Thrombin
215 ...Urokinase
216 ...Streptokinase
217 ...Plasmin (i.e., fibrinolysin)
218 ...Elastase
219 ...Proteinase
220 ....Derived from bacteria
221 .....Bacteria is bacillus
222 ......Bacillus subtilus or bacillus lichenoformis
223 ....Derived from fungi
224 .....From yeast
225 .....From aspergillus
226 ....Derived from animal tissue (e.g., rennin, etc.)
227 ..Acting on carbon to nitrogen bond other than peptide bond (3.5)
228 ...Acting on a linear amide linkage in linear amide
229 ....Asparaginase
230 ....Penicillin amidase
231 ...Acting on amide linkage in cyclic amides (e.g., penicillinase, etc.) (3.5.2)
232 .Lyase (4.)
233 .Isomerase (5.)
234 ..Glucose isomerase
235.1 **VIRUS OR BACTERIOPHAGE, EXCEPT FOR VIRAL VECTOR OR BACTERIOPHAGE VECTOR; COMPOSITION THEREOF; PREPARATION OR PURIFICATION THEREOF; PRODUCTION OF VIRAL SUBUNITS; MEDIA FOR PROPAGATING**
236 .Inactivation or attenuation; producing viral subunits
237 ..By serial passage of virus
238 ..By chemical treatment
239 .Recovery or purification
325 **ANIMAL CELL, PER SE (E.G., CELL LINES, ETC.); COMPOSITION THEREOF; PROCESS OF PROPAGATING, MAINTAINING OR PRESERVING AN ANIMAL CELL OR COMPOSITION THEREOF; PROCESS OF ISOLATING OR SEPARATING AN ANIMAL CELL OR COMPOSITION THEREOF; PROCESS OF PREPARING A COMPOSITION CONTAINING AN ANIMAL CELL; CULTURE MEDIA THEREFORE**
326 .Animal cell, per se, expressing immunoglobulin, antibody, or fragment thereof
327 ..Immunoglobulin or antibody is anti-idiotypic
328 ..Immunoglobulin or antibody is chimeric, mutated, or a recombined hybrid (e.g., bifunctional, bispecific, rodent-human chimeric, single chain, rFv, immunoglobuin fusion protein, etc.)
329 ..Immunoglobulin or antibody binds an oligosaccharide structure other than nucleic acid
330 ..Immunoglobulin or antibody binds an expression product of a cancer related gene or fragment thereof (e.g., oncogene, proto-oncogene, etc.)
331 ..Immunoglobulin or antibody binds a specifically identified amino acid sequence
332 ..Immunoglobulin or antibody binds a microorganism or normal or mutant component or product thereof (e.g., animal cell, cell surface antigen, secretory product, etc.)
333 ...Binds a nucleic acid or derivative or component thereof (e.g., DNA, RNA, DNA-RNA, hybrid, nucleotide, nucleoside, carcinogen-DNA adduct, etc.)
334 ...Binds a receptor (e.g., transferrin receptor, Fc receptor, dihydropyridine receptor, IL-2 receptor, etc.)
335 ...Binds a lymphokine, cytokine, or other secreted growth regulatory factor, differentiation factor, intercellular mediator specific for a hematopoietic cell (e.g., interleukin, interferon, erythropoietin, etc.)

336 ...Binds a hormone or other secreted growth regulatory factor, differentiation factor, intercellular mediator, or neurotransmitter (e.g., insulin, human chorionic gonadotropin, intragonadal regulatory protein, Mullerian inhibiting substance, inhibin, epidermal growth factor, nerve growth factor, dopamine, norepinephrine, etc.)

337 ...Binds a plasma protein, serum protein, or fibrin (e.g., clotting factor fibrinolytic factor, complement factor, immunoglobulin, apolipoprotein, etc.)

338 ...Binds an enzyme

339 ...Binds a virus or component or product thereof (e.g., virus associated antigen, etc.)

339.1 ....Binds a retrovirus or component or product thereof (e.g., HIV, LAV, HTLV, etc.)

340 ...Binds a bacterium or similar microorganism or component or product thereof (e.g., Streptococcus, Legionella, Mycoplasma, bacterium associated antigen, exotoxin, etc.)

341 ...Binds a fungus or plant cell or component or product thereof (e.g., fungus associated antigen, etc.)

342 ...Binds a parasitic protozoan or metazoan cell or component or product thereof; (e.g., Dirofilaria, Eimeria, Coccidia, Trichinella, parasite cell surface antigen, etc.)

343 ...Binds a hematopoietic cell or component or product thereof (e.g., erythrocyte, granulocyte, macrophage, monocyte, platelet, myelogenous leukemia cell, bone marrow stem cell, granulocytic cell surface antigen, hemoglobin, thrombospondin, glycophorin, etc.)

343.1 ....Binds a lymphocytic or lymphocytic-like cell or component or product thereof (e.g., B cell, B-lineage bone marrow cell, null cell, natural killer cell, B-lymphoblastoid cell, B-lineage, acute lymphoblastic leukemia cell, B-lymphocytic cell surface antigen, etc.)

343.2 .....Binds a T-lymphocytic cell or component or product thereof (e.g., T-cell, thymocyte, T-lineage bone marrow cell, T-lymphoblastoid cell, T-lineage acute lymphoblastic leukemia cell, T-lymphocytic cell surface antigen, etc.)

344 ...Binds a cancer cell or component or product thereof (e.g., cell surface antigen, etc.)

344.1 ....Binds an antigen characterized by name or molecular weight (e.g., CEA, NCA, CC glycoprotein, melanoma gp 150 antigen, etc.)

345 ..Immunoglobulin or antibody binds a drug, hapten, hapten-carrier complex, or specifically identified chemical structure (e.g., theophylline, digoxin, etc.)

346 .Fused or hybrid cell, per se

347 .Two or more cell types, per se, in co-culture

348 .Insect cell, per se

349 .Avian cell, per se

350 .Canine cell, per se

351 .Feline cell, per se

352 .Rodent cell, per se

353 ..Rat (i.e., Rattus)

354 ..Mouse (i.e., Mus)

355 ...Blood or lymphatic origin or derivative

356 ...L cell or derivative (e.g., Ltk(-), etc.)

357 ...Fibroblast, fibroblast-like cell or derivative (e.g., NIH 3T3, etc.)

358 ..Chinese hamster ovary (i.e., CHO)

359 ...Expressing recombinant tPA

360 ...Expressing recombinant hormone or growth factor

361 ...Expressing recombinant receptor
362 ...Expressing recombinant antigen
363 .Primate cell, per se
364 ..Monkey kidney
365 ...COS (e.g., COS-7, etc.)
365.1 ....Expressing recombinant lymphokine, interferon, hormone, growth factor or morphogen
366 ..Human
367 ...HeLa cell or derivative
368 ...Nervous system origin or derivative
369 ...Renal origin or derivative
370 ...Hepatic origin or derivative
371 ...Epithelial origin or derivative
372 ...Blood, lymphatic, or bone marrow origin or derivative
372.1 ....Myeloma origin or derivative
372.2 ....B-cell or derivative
372.3 ....T-cell or derivative
373 .Method of co-culturing cells
374 .Method of storing cells in a viable state
375 .Method of regulating cell metabolism or physiology
376 ..Method of synchronizing cell division
377 ..Method of altering the differentiation state of the cell
378 .Method of detaching cells, digesting tissue or establishing a primary culture
379 ..Using mechanical means (e.g., trituration, etc.)
380 ..Releasing bound or adhered cell using protease
381 ..Digesting tissue with protease
382 .Method of culturing encapsulated cells
383 .Method of culturing cells in suspension
384 ..Culture medium contains a growth factor or growth regulator
385 ...Medium contains a colony stimulating factor
386 ...Medium contains an interleukin
387 ...Medium contains a polypeptide hormone
388 ..Culture medium contains an albumin
389 ..Culture medium contains a transferrin
390 ..Culture medium contains an incompletely defined plant or microbial extract excluding animal extract
391 ..Culture medium contains an animal extract
392 ...Serum
393 ..Using airlift or laminar flow aeration or foam culture
394 ..Wherein culture vessel is rotated or oscillated or culture is agitated
395 .Solid support and method of culturing cells on said solid support
396 ..Support is a resin
397 ..Support is a gel surface
398 ..Support is a fiber
399 ...Fabric, mat, gauze, or fibrous coating
400 ...Hollow
401 ..Support is a membrane
402 ..Support is a coated or treated surface
403 ..Support is a suspendable particle
404 .Culture medium, per se
405 ..Contains a growth factor or growth regulator
406 ...Contains a polypeptide hormone
407 ..Contains an albumin
408 ..Contains an animal extract
410 **PLANT CELL OR CELL LINE, PER SE (E.G., TRANSGENIC, MUTANT, ETC.); COMPOSITION THEREOF; PROCESS OF PROPAGATING, MAINTAINING, OR PRESERVING PLANT CELL OR CELL LINE; PROCESS OF ISOLATING OR SEPARATING A PLANT CELL OR CELL LINE; PROCESS OF REGENERATING PLANT CELLS INTO TISSUE, PLANT PART, OR PLANT, PER SE, WHERE NO GENOTYPIC CHANGE OCCURS; MEDIUM THEREFORE**
411 .Tomato cell or cell line, per se
412 .Corn cell or cell line, per se
413 ..Herbicide resistant
414 .Tobacco cell or cell line, per se
415 .Soybean cell or cell line, per se

416 .Sunflower cell or cell line, per se
417 .Potato cell or cell line, per se
418 .Plant cell or cell line, per se, is pest or herbicide resistant or pest lethal
419 .Plant cell or cell line, per se, contains exogenous or foreign nucleic acid
420 .Culture, maintenance, or preservation techniques, per se
421 ..Involving protoplast
422 ..Involving conifer cell or tissue (e.g., pine, spruce, fir, cedar, etc.)
423 ..Involving tomato cell or tissue
424 ..Involving corn cell or tissue
425 ..Involving tobacco cell or tissue
426 ..Involving soybean cell or tissue
427 ..Involving cotton cell or tissue
428 ..Involving sunflower cell or tissue
429 ..Involving potato cell or tissue
430 ..Involving regeneration or propagation into a plant or plant part
430.1 ...Involving callus or embryonic stage
431 .Medium, per se, for culture, maintenance, regeneration, etc.
242 **SPORE FORMING OR ISOLATING PROCESS**
243 **MICRO-ORGANISM, PER SE (E.G., PROTOZOA, ETC.); COMPOSITIONS THEREOF; PROCES OF PROPAGATING, MAINTAINING OR PRESERVING MICRO-ORGANISMS OR COMPOSITIONS THEREOF; PROCESS OF PREPARING OR ISOLATING A COMPOSITION CONTAINING A MICRO-ORGANISM; CULTURE MEDIA THEREFOR**
244 .Chemical stimulation of growth or activity by addition of chemical compound which is not an essential growth factor; stimulation of growth by removal of a chemical compound
245 .Adaptation or attenuation of cells
246 .Foam culture
247 .Utilizing media containing lower alkanol (i.e., having one to six carbon atoms)
248 .Utilizing media containing hydrocarbon
249 ..Aliphatic
250 ...Having five or less carbon atoms
251 .Utilizing media containing waste sulphite liquor
252 .Utilizing media containing cellulose or hydrolysates thereof
252.1 .Bacteria or actinomycetales; media therefor
252.2 ..Rhizobium or agrobacterium
252.3 ..Transformants (e.g., recombinant DNA or vector or foreign or exogenous gene containing, fused bacteria, etc.)
252.31 ...Bacillus (e.g., B. subtilis, B. thuringiensis, etc.)
252.32 ...Brevibacterium or corynebacterium
252.33 ...Escherichia (e.g., E. coli, etc.)
252.34 ...Pseudomonas
252.35 ...Streptomyces
252.4 ..Mixed culture
252.5 ..Bacillus (e.g., B. subtilis, B. thuringiensis, etc.)
252.6 ..Actinoplanes
252.7 ..Clostridium
252.8 ..Escherichia (e.g., E. coli, etc.) or salmonella
252.9 ..Lactobacillus, pediococcus, or leuconostoc
253.1 ..Mycobacterium
253.2 ..Nocardia
253.3 ..Pseudomonas
253.4 ..Streptococcus
253.5 ..Streptomyces
253.6 ..Culture media, per se
254.1 .Fungi
254.11 ..Transformants
254.2 ...Yeast; media therefor
254.21 ....Saccharomyces
254.22 ....Candida
254.23 ....Pichia
254.3 ...Aspergillus
254.4 ...Neurospora
254.5 ...Penicillium
254.6 ...Trichoderma
254.7 ...Fusarium

254.8 ...Mucor
254.9 ...Rhizopus
255.1 ..Yeast
255.2 ...Saccharomyces
255.21 ....Culture media, per se, or technique
255.3 ...Cryptococcus
255.4 ...Candida or torulopsis
255.5 ...Pichia
255.6 ...Hansenula
255.7 ...Culture media, per se, or technique
256.1 ..Aspergillus
256.2 ..Mucor
256.3 ..Penicillium
256.4 ..Cephalosporium or acremonium
256.5 ..Fusarium
256.6 ..Rhizopus
256.7 ..Trichoderma
256.8 ..Culture media, per se, or technique
257.1 .Algae, media therefor
257.2 ..Transformants
257.3 ..Chlorella
257.4 ..Euglena
257.5 ..Scenedesmus
257.6 ..Chlamydomonas
258.1 .Protozoa, media therefor
258.2 ..Plasmodium
258.3 ..Leishmania
258.4 ..Eimeria
259 .Lysis of micro-organism
260 .Preserving or maintaining micro-organism
261 .Separation of micro-organism from culture media
320.1 **VECTOR, PER SE (E.G., PLASMID, HYBRID PLASMID, COSMID, VIRAL VECTOR, BACTERIOPHAGE VECTOR, ETC.) BACTERIOPHAGE VECTOR, ETC.)**
262 **PROCESS OF UTILIZING AN ENZYME OR MICRO-ORGANISM TO DESTROY HAZARDOUS OR TOXIC WASTE, LIBERATE, SEPARATE, OR PURIFY A PREEXISTING COMPOUND OR COMPOSITION THEREFORE; CLEANING OBJECTS OR TEXTILES**
262.5 .Destruction of hazardous or toxic waste
263 .Textile treating
264 .Cleaning using a micro-organism or enzyme
265 .Depilating hides, bating, or hide treating using enzyme or micro-organism
266 .Treating gas, emulsion, or foam
267 .Treating animal or plant material or micro-organism
268 ..Treating organ or animal secretion
269 ..Treating blood fraction
270 ..Removing nucleic acid from intact or disrupted cell
271 ..Glyceridic oil, fat, ester-type wax, or higher fatty acid recovered or purified
272 ..Proteinaceous material recovered or purified
273 ...Collagen or gelatin
274 ..Carbohydrate material recovered or purified
275 ...Pectin or starch
276 ...Sugar (e.g., molasses treatment, etc.)
277 ...Cellulose (e.g., plant fibers, etc.)
278 ....Producing paper pulp
279 ....Hemp or flax treating
280 .Resolution of optical isomers or purification of organic compounds or composition containing same
281 .Petroleum oil or shale oil treating
282 ..Desulfurizing
283.1 **APPARATUS**
284.1 .Differentiated tissue (e.g., organ) perfusion or preservation apparatus
285.1 .Mutation or genetic engineering apparatus
285.2 ..With means for applying an electric current or charge (e.g., electrofusion, electroporation, etc.)
285.3 ..Including projectile means
286.1 .Including condition or time responsive control means
286.2 ..Including position control
286.3 ...Plater, streaker, or spreader
286.4 ...Including liquid dispenser means
286.5 ..Including liquid flow, level, or volume control
286.6 ..Including gas flow or pressure control

286.7 ..Including mixing or agitation control
287.1 .Including measuring or testing
287.2 ..Measuring or testing for antibody or nucleic acid, or measuring or testing using antibody or nucleic acid
287.3 ..With sample or reagent mechanical transport means
287.4 ..Sterility testing means
287.5 ..Means for measuring gas pressure or gas volume of gas evolved from or consumed in an enzymatic or microbial reaction
287.6 ..Including frangible means for introducing a sample or reagent
287.7 ..Including bibulous or absorbent layer
287.8 ...Including multiple, stacked layers
287.9 ..Including a coated reagent or sample layer
288.1 ..Including a bottle, tube, flask, or jar
288.2 ...Including multiple internal compartments or baffles
288.3 ..Including a dish, plate, slide, or tray
288.4 ...Including multiple compartments (e.g., wells, etc.)
288.5 ....Including means for fluid passage between compartments (e.g., between wells, etc.)
288.6 ..Including column separation means
288.7 ..Including optical measuring or testing means
289.1 .Bioreactor
290.1 ..Composting apparatus
290.2 ...Including agitation means
290.3 ....Compostor is rotatably mounted
290.4 ...Including solid or liquid transport means into or out of a compostor
291.1 ..Malting or mashing apparatus
291.2 ...Movable floor to facilitate maintenance (e.g., cleaning)
291.3 ...Vertically spaced stages, levels, or floors
291.4 ....Cascading
291.5 ...With agitator or mash turner
291.6 ....With vertical axis of rotation
291.7 ....With horizontal axis of rotation
291.8 .....Rotating vessel
292.1 ..Including means to transmit light into a bioreactor to facilitate photo- bioreaction (e.g., photosynthesis)
293.1 ..Tubular or plug flow bioreactor
293.2 ...Radial or spiral flow bioreactor
294.1 ..Vessels or trays in series
295.1 ..Including a draft tube for agitation
295.2 ...Airlift bioreactor
295.3 ...Including a semi-permeable membrane or filter
296.1 ..Bubble bioreactor
297.1 ..Including semipermeable membrane or filter
297.2 ...Including perfusion means
297.3 ....Including a spinning semipermeable membrane or filter
297.4 ....Including hollow fiber or capillary
297.5 ...In combination with a dish, plate, or tray
298.1 ..Cylindrical reaction tank or vessel horizontally disposed with respect to its central axis
298.2 ...With a rotatably mounted tank or vessel
299.1 ..Including solid extended fluid contact reaction surface
299.2 ...Including a bottle, tube, jar, or flask
300.1 ..Including off-gas trapping means
301.1 ..Including foam breaking means
302.1 ..Including magnetically coupled agitation means
303.1 ..Incubator
303.2 ...Specifically adapted for an anaerobic microorganism or enzyme (e.g., anaerobe jars)
303.3 ...Including an agitator
304.1 ..Bottle, tube, jar, or flask
304.2 ...Including multiple internal compartments for baffles
304.3 ...Flat culture flask
305.1 ..Dish, plate, or tray
305.2 ...Multicompartmented

305.3 ....Including cover seal
305.4 ...Including cover seal
306.1 .Involving lysis of a microorganism by means other than comminution
307.1 .Microorganism preservation, storage, or transport apparatus
308.1 .Means for separation or recovery of a microorganism from culture media
309.1 .Inoculator, streaker, or sampler
309.2 ..Means for inoculation or sampling of a closed vessel
309.3 ..Loop or wire streaker
309.4 ..Replica plate
317.1 **MISCELLANEOUS (E.G., SUBCELLULAR PARTS OF MICRO-ORGANISMS, ETC.)**

CROSS-REFERENCE ART COLLECTIONS

800 **ELIMINATION OR REDUCTION OF CONTAMINATION BY UNDERSIRED FERMENTS (E.G., ASEPTIC CULTIVATION)**
801 **ANEROBIC CULTIVATION**
802 **LOGARITHMIC GROWTH PHASE**
803 **PHYSICAL RECOVERY METHODS (E.G., CHROMATOGRAPHY, GRINDING)**
804 **SINGLE CELL PROTEIN**
805 **TEST PAPERS**
806 **FERTILITY TESTS**
807 **GAS DETECTION APPARATUS**
808 **OPTICAL SENSING APPARATUS**
809 **INCUBATORS OR RACKS OR HOLDERS FOR CULTURE PLATES OR CONTAINERS**
810 **PACKAGED DEVICE OR KIT**
811 **INTERFERON**
812 **FOAM CONTROL**
813 **CONTINUOUS FERMENTATION**
814 **ENZYME SEPARATION OR PURIFICATION**
815 .By sorption
816 .By solubility
817 **ENZYME OR MICROBE ELECTRODE**
818 **AERATION OR OXYGEN TRANSFER TECHNIQUE**
819 **FERMENTATION VESSELS IN SERIES**
820 **SUBCELLULAR PARTS OF MICRO-ORGANISMS**
821 **MICRO-ORGANISMS USED IN THE DESTRUCTION OF HAZARDOUS OR TOXIC WASTE**
MICRO-ORGANISM CROSS-REFERENCE ART COLLECTIONS
822 .Using bacteria or actinomycetales
823 ..Acetobacter
824 ..Achromobacter
825 ..Actinomadura
826 ..Actinomyces
827 ..Actinoplanes
828 ..Aerobacter
829 ..Alcaligenes
830 ..Arthrobacter
831 ..Azotobacter
832 ..Bacillus
833 ...Bacillus brevis
834 ...Bacillus cereus
835 ...Bacillus circulans
836 ...Bacillus licheniformis
837 ...Bacillus megaterium
838 ...Bacillus polymyxa
839 ...Bacillus subtilis
840 ..Brevibacterium
841 ..Chainia
842 ..Clostridium
843 ..Corynebacterium
844 ...Corynebacterium diphtheriae
845 ...Corynebacterium poinsettiae
846 ...Corynebacterium pyogenes
847 ..Erwinia
848 ..Escherichia
849 ...Escherichia coli
850 ..Flavobacterium
851 ..Haemophilus
852 ..Klebsiella
853 ..Lactobacillus
854 ...Lactobacillus acidophilus
855 ...Lactobacillus brevis
856 ...Lactobacillus casei
857 ...Lactobacillus plantarum
858 ..Methylomonas
859 ..Micrococcus
860 ...Micrococcus flavus
861 ...Micrococcus glutamicus
862 ...Micrococcus lysodeikticus
863 ..Mycobacterium
864 ...Mycobacterium avium
865 ...Mycobacterium fortuitum
866 ...Mycobacterium smegmatis
867 ..Micromonospora
868 ...Micromonospora chalcea
869 ...Micromonospora purpurea

870 ..Mycoplasma
871 ..Neisseria
872 ..Nocardia
873 ..Proteus
874 ..Pseudomonas
875 ...Pseudomonas aeruginosa
876 ...Pseudomonas fluorescens
877 ...Pseudomonas putida
878 ..Rhizobium
879 ..Salmonella
880 ..Serratia
881 ...Serratia marcescens
882 ..Staphylococcus
883 ...Staphylococcus aureus
884 ...Staphylococcus epidermidis
885 ..Streptococcus
886 ..Streptomyces
887 ...Streptomyces albus
888 ...Streptomyces antibioticus
889 ...Streptomyces aureofaciens
890 ...Streptomyces aureus
891 ...Streptomyces bikiniensia
892 ...Streptomyces candidus
893 ...Streptomyces chartreusis
894 ...Streptomyces diastatochromogenes
895 ...Streptomyces filipinensis
896 ...Streptomyces fradiae
897 ...Streptomyces griseus
898 ...Streptomyces hygroscopicus
899 ...Streptomyces lavendulae
900 ...Streptomyces lincolnensis
901 ...Streptomyces noursei
902 ...Streptomyces olivaceus
903 ...Streptomyces platensis
904 ...Streptomyces rimosus
905 ...Streptomyces sparogenes
906 ...Streptomyces venezuelae
907 ..Streptosporangium
908 ..Streptovirticillium
909 ..Vibrio
910 ..Xanthomonas
911 .Using fungi
912 ..Absidia
913 ..Aspergillus
914 ...Aspergillus awamori
915 ...Aspergillus flavus
916 ...Aspergillus fumigatus
917 ...Aspergillus niger
918 ...Aspergillus oryzae
919 ...Aspergillus ustus
920 ...Aspergillus wenti
921 ..Candida
922 ...Candida albicans
923 ...Candida lipolytica
924 ...Candida tropicalis
925 ..Cephalosporium
926 ...Cephalosporium acremonium
927 ...Cephalosporium caerulens
928 ...Cephalosporium crotocinigenium
929 ..Fusarium
930 ..Hansenula
931 ..Mucor
932 ..Paecilomyces
933 ..Penicillium
934 ...Penicillium brevi
935 ...Penicillium chrysogenum
936 ...Penicillium notatium
937 ...Penicillium patulum
938 ..Pichia
939 ..Rhizopus
940 ..Saccharomyces
941 ...Saccharomyces carlsbergensis
942 ...Saccharomyces cerevisiae
943 ...Saccharomyces lactis
944 ..Torulopsis
945 ..Trichoderma
946 .Using algae
947 .Using protozoa
948 .Using viruses or cell lines

CROSS-REFERENCE ART COLLECTIONS

RELATED TO SUBCLASSES 7.1 THROUGH 7.95

960 **IMMUNOHISTOCHEMICAL ASSAY**
961 **INCLUDING A STEP OF FORMING, RELEASING, OR EXPOSING THE ANTIGEN OR FORMING THE HAPTEN-IMMUNOGENIC CARRIER COMPLEX OR THE ANTIGEN, PER SE**
962 **PREVENTION OR REMOVAL OF INTERFERING MATERIALS OR REACTANTS OR OTHER TREATMENT TO ENHANCE RESULTS (E.G., DETERMINING OR PREVENTING NONSPECIFIC BINDING, ETC.)**
963 **METHODS OF STOPPING AN ENZYME REACTION OR STABILIZING THE TEST MATERIALS**
964 **INCLUDING ENZYME-LIGAND CONJUGATE PRODUCTION (E.G., REDUCING RATE OF NONPRODUCTIVE LINKAGE, ETC.)**
965 **INVOLVING IDIOTYPE OR ANTI-IDIOTYPE ANTIBODY**

966 **INVOLVING AN ENZYME SYSTEM WITH HIGH TURNOVER RATE OR COMPLEMENT MAGNIFIED ASSAY (E.G., MULTI-ENZYME SYSTEMS, ETC.)**
967 **STANDARDS, CONTROLS, MATERIALS (E.G., VALIDATION STUDIES, BUFFER SYSTEMS, ETC.)**
968 **HIGH ENERGY SUBSTRATES (E.G., FLUORESCENT, CHEMILUMINESCENT, RADIOACTIVE, ETC.)**
969 **MULTIPLE LAYERING OF REACTANTS**
970 **TEST STRIP OR TEST SLIDE**
971 **CAPTURE OF COMPLEX AFTER ANTIGEN-ANTIBODY REACTION**
972 **MODIFIED ANTIBODY (E.G., HYBRID, BIFUNCTIONAL, ETC.)**
973 **SIMULTANEOUS DETERMINATION OF MORE THAN ONE ANALYTE**
974 **AIDS RELATED TEST**
975 **KIT**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 **ANIMAL OR PLANT CELL (E.G., CELL LINES, ETC.); COMPOSITIONS THEREOF; PROCESS OF PROPAGATING, MAINTAINING OR PRESERVING ANIMAL OR PLANT CELL OR COMPOSITION THEREOF; PROCESS OF ISOLATING OR SEPARATING AN ANIMAL OR PLANT CELL OR COMPOSITION THEREOF; PROCESS OF PREPARING A COMPOSITION CONTAINING ANIMAL OR PLANT CELL; CULTURE MEDIA THEREFORE (435/240.1)**
FOR 101 .Animal cells, per se, culture techniques and media (435/240.2)
FOR 102 ..Techniques of establishing a primary culture (435/240.21)
FOR 103 ..Culture of encapsulated cells (435/240.22)
FOR 104 ..Culture of cells on solid support (e.g., anchorage dependent cells) (435/240.23)
FOR 105 ...Support is suspendable particle (435.240.24)
FOR 106 ...Culture of cells on membrane (435/240.241)
FOR 107 ....Hollow fiber membrane (435/240.242)
FOR 108 ...Solid support treated or coated to enhance attachment or growth (435/240.243)
FOR 109 ..Culture in suspension (435/240.25)
FOR 110 ..Fused or hybrid cells (435/240.26)
FOR 111 ...Ab or Ig fragments producing cells (435/240.27)
FOR 112 ..Culture medium, per se (435/240.3)
FOR 113 ...Defined medium (435/240.31)
FOR 114 .Plant cells, per se, culture techniques and media (435/240.4)
FOR 115 ..Culture techniques (e.g., meristem culture, etc.) (435/240.45)
FOR 116 ...Culture in suspension (435/240.46)
FOR 117 ....Protoplasts (435/240.47)
FOR 118 ...Callus culture (435/240.48)
FOR 119 ....Regeneration (includes nonflowering ornamentals (435/240.49)
FOR 120 .....Agronomic crops (e.g., tobacco, grains, etc.) (435/240.5)
FOR 121 .....Fruit and vegetable crops (e.g., tomato, etc.) (435/240.51)
FOR 122 ..Culture medium, per se, or regeneration medium, per se (435/240.54)
FOR 123 **MUTATION OR GENETIC ENGINEERING (435/172.1)**
FOR 124 .Fused or hybrid cell formation (435/172.2)
FOR 125 .Recombination (435/172.3)

FOR 126 **OBTAINING THE DESIRED GENE; DNA, RNA PER SE AND THE MODIFICATION THEREOF OTHER THAN VECTOR MODIFICATION (935/1)**
FOR 127 .DNA-RNA hybrid (935/2)
FOR 128 .RNA (935/3)
FOR 129 ..mRNA (935/4)
FOR 130 ..2-100 nucleotides in length, e.g., t-RNA, etc. (935/5)
FOR 131 .DNA, e.g., regulatory sequences, etc. (935/6)
FOR 132 ..Homopolymeric, e.g., poly d(A) sequence, etc. (935/7)
FOR 133 ..12-75 nucleotides in length, e.g., primers, etc. (935/8)
FOR 134 ..Structural gene sequence (935/9)
FOR 135 ...Modified structural gene, e.g., nonnaturally occurring sequence, etc. (935/10)
FOR 136 ...Polypeptide (935/11)
FOR 137 ....Antigenic material (935/12)
FOR 138 ....Hormone, e.g., human growth factor, insulin, etc. (935/13)
FOR 139 ....Enzyme (935/14)
FOR 140 ....Antibody (935/15)
FOR 141 .Methods of producing DNA or RNA other than by expression vectors, e.g., culture of cells high in DNA, etc. (935/16)
FOR 142 ..Cell free production (935/17)
FOR 143 ...cDNA synthesis (935/18)
FOR 144 .Isolation or purification of DNA or RNA (935/19)
FOR 145 ..RNA (935/20)
FOR 146 ...mRNA (935/21)
FOR 147 **VECTORS AND METHODS OF MODIFYING VECTORS (935/22)**
FOR 148 .Inserting gene into vector to form recombinant vector, i.e., cleavage and ligation (935/23)
FOR 149 ..Vector utilized, e.g., episomes, etc. (935/24)
FOR 150 ...Plant virus (935/25)
FOR 151 ...Cosmid (935/26)
FOR 152 ...Plasmid (935/27)
FOR 153 ....Yeast (935/28)
FOR 154 ....Prokaryotic (935/29)
FOR 155 ....Plant (935/30)
FOR 156 ...Bacteriophage (935/31)
FOR 157 ...Animal virus, e.g., SV40, etc. (935/32)
FOR 158 **METHODS OF ENHANCING OR DIMINISHING EXPRESSION (935/33)**
FOR 159 .Eukaryotic cell (935/34)
FOR 160 ..Plant cell (935/35)
FOR 161 ..Transcription (935/36)
FOR 162 ..Yeast cell (935/37)
FOR 163 .Prokaryotic cell (935/38)
FOR 164 ..Transcription (935/39)
FOR 165 ...Operon selection (935/40)
FOR 166 ....Promoter, e.g., portable promoters, etc. (935/41)
FOR 167 ..Gene dosage modification, e.g., copy number amplification, etc. (935/42)
FOR 168 ...Inducible, e.g., temperature inducible, etc. (935/43)
FOR 169 ..Translation (935/44)
FOR 170 ...Ribosome binding site (935/45)
FOR 171 ...Initiation (935/46)
FOR 172 .Fused protein or peptide (435/47)
FOR 173 ..Signal peptide, e.g., secretion, etc. (935/48)
FOR 174 .Post translational modification (935/49)
FOR 175 ..Glycosylation (935/50)
FOR 176 ..Peptide bond cleavage (935/51)
FOR 177 **METHODS OF INTRODUCING GENE INTO HOST CELL, E.G., TRANSFORMATION OR TRANSFECTION, ETC. (935/52)**
FOR 178 .Microinjection (935/53)
FOR 179 .Microencapsulation, e.g., liposome vesicle, etc. (935/54)
FOR 180 .Using vector, e.g., plasmid, etc. (935/55)
FOR 181 ..Plasmid (935/56)
FOR 182 ..Virus (935/57)
FOR 183 ...Phage, e.g., phage lambda, etc. (935/58)
FOR 184 **METHOD OF USE OF GENETICALLY ENGINEERED CELLS, E.G., OIL SPILL CLEANUP, ETC. (935/59)**
FOR 185 .To produce an identified chemical product, e.g., amino acid, etc. (935/60)
FOR 186 ..Yield optimization (935/61)
FOR 187 .Control of genetic diseases or defects by use of added gene, e.g., gene therapy (935/62)
FOR 188 .Use in animal husbandry (935/63)
FOR 189 .Use in agriculture (935/64)
FOR 190 .Vaccine production (935/65)

FOR 191 **CELLS CONTAINING A VECTOR AND/OR EXOGENOUS GENE, PER SE; PROPAGATION THEREOF; OTHER MEMBRANE ENCAPSULATED DNA, E.G., PROTOPLASTS, ETC. (935/66)**
FOR 192 .Plant cells (935/67)
FOR 193 .Fungal cells (935/68)
FOR 194 ..Yeast cells (935/69)
FOR 195 .Animal cell (935/70)
FOR 196 ..Human cell (935/71)
FOR 197 .Bacteria (935/72)
FOR 198 ..Escherichia (935/73)
FOR 199 ..Bacillus (935/74)
FOR 200 ..Streptomyces (935/75)
FOR 201 **ASSAY RELATED TO GENETIC ENGINEERING (935/76)**
FOR 202 .Methods of analysis of nucleic acids (935/77)
FOR 203 ..Including hybridization (935/78)
FOR 204 .Methods of selection of recombinant gene containing vector; materials therefore, e.g., replica plating, etc. (935/79)
FOR 205 ..Gene library manipulation (935/80)
FOR 206 ..Antigen-antibody (935/81)
FOR 207 ..Enzyme activity (935/82)
FOR 208 ..Host suicide (935/83)
FOR 209 ..Selection medium (935/84)
FOR 210 **GENETIC ENGINEERING APPARATUS (935/85)**
FOR 211 .Analytical, e.g., for autoradiography, etc. (935/86)
FOR 212 ..Automated (935/87)
FOR 213 .Synthesis, e.g., peptide or gene synthesizers, etc. (935/88)
FOR 214 **HYBRID OR FUSED CELL TECHNOLOGY, METHODS OF IMMORTALIZING CELLS, E.G., HYBRIDOMA, ETC. (935/89)**
FOR 215 .Method of selection of the desired cell (935/90)
FOR 216 ..Of plant cells, e.g., protoplasts, etc. (935/91)
FOR 217 ..Using positive selection technique (935/92)
FOR 218 .Method of production of hybrid or fused cells, e.g., chromosome or genome transfer techniques, etc. (935/93)
FOR 219 ..Of plant cells (935/94)
FOR 220 .Fused or hybrid cell, per se (935/95)
FOR 221 ..Interspecies fusion (935/96)
FOR 222 ..Fungi, e.g., yeasts, etc. (935/97)
FOR 223 ..Plant cells (935/98)
FOR 224 ..Human cell 935/99)
FOR 225 ...B lymphocyte (935/100)
FOR 226 ...T lymphocyte (935/101)
FOR 227 ..Animal cell (935/102)
FOR 228 ...Murine cell, e.g., mouse cell, etc. (935/103)
FOR 229 ....B lymphocyte (935/104)
FOR 230 ....T lymphocyte (935/105)
FOR 231 .Method of use of the fused or hybrid cell or the product thereof (935/106)
FOR 232 ..In vivo use of product
FOR 233 ..In vitro, e.g., cell cultivation techniques, affinity chromatography, etc. (935/108)
FOR 234 ...Production of non-antibody product (935/109)
FOR 235 ...For use as testing material (935/110)
FOR 236 **MISCELLANEOUS (935/111)**

DIGESTS

DIG 1 **COMBINATORIAL CHEMISTRY AND LIBRARY TECHNOLOGY**
DIG 2 .Method of screening a library
DIG 3 ..Involving a biologically replicable entity (e.g., genetic package, vector, etc.) which is the library, displays the library, contains the library or presents the library
DIG 4 ...The entity is a virus or bacteriophage
DIG 5 ...The entity is a microorganism, animal cell or plant cell
DIG 6 ....Animal cell
DIG 7 ....Yeast or fungus
DIG 8 ....Bacteria or protozoa
DIG 9 ..Screening a library of inorganic compounds or materials
DIG 10 ...Screening for catalytic activity

DIG 11 ...The compound or material is metal containing
DIG 12 ....Alloy
DIG 13 ....Metal oxide
DIG 14 ..Screening a library of organic compounds or materials
DIG 15 ...The compound or material is a peptide or a polypeptide or derivative thereof
DIG 16 ....Peptide nucleic acid (i.e., PNA)
DIG 17 ...The compound or material is a nucleotide or a polynucleotide or derivative thereof
DIG 18 ...The compound or material is a carbohydrate or derivative thereof
DIG 19 ...The compound or material is a polymer
DIG 20 ..Virtual/computer based screening method (e.g., using crystallographic coordinates of a target, etc.)
DIG 21 ..Using deconvolution (e.g., tagging or encoding methodology, etc.)
DIG 22 .Library or combinatorial chemistry related product
DIG 23 ..Library of biologically replicable entities (e.g., genetic packages, vectors, etc.) or a biologically replicable entity (e.g., genetic packages, vectors, etc.) displaying, containing or presenting the library elements
DIG 24 ...The entity is a virus or bacteriophage
DIG 25 ...The entity is a microorganism, animal cell or plant cell
DIG 26 ....Animal cell
DIG 27 ....Yeast or fungus
DIG 28 ....Bacteria or protozoa
DIG 29 ..Library of inorganic compounds or materials
DIG 30 ...The compound or material is a catalyst
DIG 31 ...The compound or material is metal containing
DIG 32 ....Alloy
DIG 33 ....Metal oxide
DIG 34 ..Library of organic compounds or materials
DIG 35 ...The compound or material is a peptide or a polypeptide or derivative thereof
DIG 36 ....Peptide nucleic acid (i.e., PNA)
DIG 37 ...The compound or material is a nucleotide or a polynucleotide or derivative thereof
DIG 38 ...The compound or material is a carbohydrate or derivative thereof
DIG 39 ...The compound or material is a polymer
DIG 40 ..Support
DIG 41 ..Tagging, encoding or labeling agent or material (e.g., microchip transponders, etc.)
DIG 42 ..Linking agent for connecting support to library element
DIG 43 .Apparatus
DIG 44 ..For preparing libraries
DIG 45 ..For screening
DIG 46 .Method of making a library
DIG 47 ..Using biological means (e.g., using enzyme, microorganism, cell, cellular genetic component, etc.)
DIG 48 ..Wherein library members are bound to a soluble support
DIG 49 ..Wherein library members are bound to a solid support
DIG 50 ..Employing solution phase synthesis not utilizing a support
DIG 51 ..Virtual method of making, designing or optimizing a library